APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000928210005-4"

KUZNETSOV, V.I.; BLEDNYKH, A.G.; DOBROVOL'SKIY, A.F.; GENSINA, Ye.D.

Use of products of primary tar from Ukrainian brown coals for disinfection. Zhur.mikrobiol.epid. i immun.,supplement for 1956:36-37 '57 (MIRA 11:3)

(COAL-TAR PRODUCTS) (DISINFECTION AND DISINFECTANTS)

KUZNETSOV, V.I.

73-2-20/22

AUTHORS: Fadeicheva A.G. and Kuznetsov V.I.

TITLE: Complex utilisation of lignites of the Ukrainian RSS. XVII: Phenols of primary lignite tars of the Ukrainian RSS. (Kompleksnoye ispol'zovannye burykh ugley USSR. XVII: Fenoly pervichnoy smoly burykh ugley USSR).

PERIODICAL: "Ukrainskiy Khimicheskiy Zhurnal" (Ukrainian Journal of Chemistry), Vol.23, No.2, March-April, 1957, pp.266-271 (USSR).

ABSTRACT: Tars obtained by semi-coking of bituminous lignites of the Ukraine contain up to 9 to 10% phenols. Hitherto no data have been available on the composition of phenols obtained by the low-carbonisation of tars. To obtain these data phenols were prepared from fractions of lignite tar, i.e. from petroleum, petroleum naphtha and paraffin oils. The fractions were treated with a 10% H_2SO_4 solution and a 5% solution of calcium bicarbonate to extract the carboxylic acids. Phenols were extracted from the fractions with a 13% solution of sodium hydroxide at 18 to 20 C. The obtained phenolates were purified and decomposed with a 20% H_2SO_4 solution. The extracted tar is soluble in acetone, ethyl alcohol and insoluble in benzene,

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73-2-20/22

Complex utilisation of lignites of the Ukrainian RSS. XVII: Phenols of primary lignite tars of the Ukrainian RSS. (Cont.)

petroleum and petroleum ether. The most valuable components were shown to occur in the first three fractions and represent 7.2% of the weight of the tar. The lower phenol content is 3.8% (Table 1). The content of sulphur-containing compounds in the phenols increases with increasing boiling point of the fractions. The crude phenols separated from the individual fractions contained solid phenols (or so called acid asphaltenes), which are insoluble in petroleum ether. Phenols of the paraffin contain 50% solid phenols. The latter are completely soluble in ether, benzene, alcohol and aqueous alkalis. The crude phenols were rectified at 20 mm HG pressure. The phenols of the benzene and ligroine fractions consist mainly of phenol and cresols. The kerosene and paraffin fractions contained a considerable quantity of xylenol and high-boiling phenols (Tables 2, 3, 5 and 6). Liquid phenols of the paraffin fraction contain mostly high-boiling phenols which are difficult to distil. Fractions of phenols

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73-2-20/22

Complex utilisation of lignites of the Ukrainian RSS. XVII: Phenols of primary lignite tars of the Ukrainian RSS. (Cont.)

boiling between 204-226 C were separated into 3 fractions. Data tabulated in Table 4 show that the xylenol fractions contained considerable quantities of cresols (1, 3, 5-xylenol and 1, 4, 2-xylenol).

There are 6 tables and 5 references, 2 of which are Slavic.

ASSOCIATION: Institute of Thermal Power, Academy of Sciences, USSR (Institut Teploenergetiki AN USSR).

SUBMITTED: July 30, 1956.

AVAILABLE: Library of Congress

Card 3/3

KUZNETSOV, V. I.

73-3-22/24

AUTHOR: Kuznetsov, V. I., and Fadeicheva, A. G.

TITLE: Complex Utilisation of Ukrainian Lignites, XVIII. The Purification of Primary Tar Phenols of Ukrainian Lignites from Neutral Oils and Sulphur Compounds. (Kompleksnoye Ispol'zovaniye Burykh Ugley USSR. XVIII. K Voprosu Ochistki Fenolov Pervichnoy Smoly Burykh Ugley USSR ot Neytral'nykh Masel i Sernistykh Soyedineniy)

PERIODICAL: Ukrainskiy Khimicheskiy Zhurnal, 1957, Vol. 23, No.3, pp. 406-410 (USSR)

ABSTRACT: The purification of phenols, obtained from tars by thermal decomposition, is very important for industry. They have to be purified from neutral oils and sulphur compounds. A method for separating these oils by using superheated steam gave satisfactory results and can be recommended for industrial purposes. It makes it possible to obtain phenols with 2.4 - 4.8% neutral oils which give suitable materials for plastics. The phenolates were prepared by treating separate fractions of primary tar with a 13% NaOH solution. These phenolates contain varying amounts of neutral oils, e.g. fractions boiling at 120 - 315°C contain 12.1% neutral oils, this content increases to 22.4% for fractions boiling at 360°C. The temperature of the superheated steam was 250°C as higher temperatues cause oxidation of the phenols. This

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73-3-22/24

Complex Utilisation of Ukrainian Lignites. XVIII. The Purification of Primary Tar Phenols of Ukrainian Lignites from Neutral Oils and Sulphur Compounds.

method makes it possible to lower the content of neutral oils from 21% to 2.8%. Satisfactory results were obtained at a steam temperature of 200°C. The residual neutral oils constituted under these conditions 4.9% at a 100% steam consumption and 3.8% at a 150% steam consumption. A 84.2 - 88.1% efficiency of separation is reached; when 200% steam is used the efficiency increases to 90.7%. When superheated steam of 200°C is used a further decrease of neutral oils ensues and the efficiency of purification reaches 90.6, 91.3 and 92.6% at a corresponding steam consumption of 100, 150 and 200%. Laboratory data were confirmed with pilot plant experiments when mixtures of phenolates obtained during alkaline treatment of benzene-, ligroine- and kerosine-fractions and of paraffinic oils. Results of these experiments (Table 1) confirm the previously obtained data. The neutral oil content can be reduced considerably by extracting the phenols from very narrow fractions. The phenolates absorb to a large extent acidic and neutral oxygen-containing compounds and unsaturated hydrocarbons. Sulphur compounds of phenols can be separated during the rectification of phenols by addition of a small quantity

Card 2/3

73-3-22/24

Complex Utilisation of Ukrainian Lignites. XVIII. The Purification of Primary Tar Phenols of Ukrainian Lignites from Neutral Oils and Sulphur Compounds.

of air or by treating the phenols with reduced bog ore at 200 - 250°C. Figure 1 shows graphs of a standard distillation of a neutral oil and of a dephenolised fraction, the distribution of sulphur in tar fractions in phenols, separated from these fractions is shown in figure 2. The sulphur content in phenols was decreased to 0.25% (from 0.78%), i.e. a 70% efficiency was attained. There are 2 figures and 1 Slavic reference.

SUBMITTED: July, 30, 1956.

ASSOCIATION: Institute of Thermal Power, Academy of Sciences, Ukrainian SSR. (Institut Teploonergetiki AN USSR)

AVAILABLE: Library of Congress.

Card 3/3

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000928210005-4"

Kuznetsov, U. I.

11(7) P-2 PHASE I BOOK EXPLOITATION SOV/2794

Akademiya nauk Ukrainskoy SSR. Institut teploenergetiki

Izucheniye i kompleksnaya pererabotka smol i bitumov burykh ugley Dneprovskogo basseyna, ch. 2 (Study of Tars and Bitumens of Dnepr Basin Brown Coal and Their Comprehensive Conversion, Pt. 2) Kiyev, 1958. 127 p. 1,000 copies printed.

Resp. Ed.: N. M. Karavayev, Professor, Corresponding Member, USSR Academy of Sciences; Ed. of Publishing House: T. K. Remennik; Tech. Ed.: I. D. Milekhin.

PURPOSE: This collection of articles is intended for scientific workers in fuel research institutes as well as for technical and engineering personnel studying problems of comprehensive utilization of solid fuels.

COVERAGE: This collection of articles on the utilization of coal for chemical products is the result of investigations made by the Institute of Thermal Power Engineering of the Academy of Science of the Ukrainian SSR. The process of converting tar and carbobitumens produced through the thermal decomposition of Dneper basin brown coal is analyzed. The importance of the utilization of gases and products of thermal conversion of solid fuel for the growing

Card 1/4

production of synthetic materials is pointed out. The use of solid fuels both as a source of heat energy and as a source of chemicals is emphasized. References accompany individual articles.

TABLE OF CONTENTS:

Study of Tars and Bitumens (Cont.) SOV/2794

AVAILABLE: Library of Congress (TP953.A35)

Card 4/4

TM/os
1/11/60

KUZNETSOV, V.I.; KIGEL', T.B.

Using Pyzhevskii bentonites for purifying lignite paraffins.
Bent. gliny Ukr. no.2:189-194 '58. (MIRA 12:12)

1.Institut teploenergetiki AN USSR.
(Paraffins) (Bentonite)

BOBROVA, Anfisa Alekseyevna; KUZNETSOV, V.I., kand.khim.nauk, otv. red.; CHEKHOVICH, N.Ya., red.izd-va; MOZURIK, T.Ya., tekhn.red.

[Bituminous tar from Aleksandriyskiy brown coal] Smola bitumu z oleksandriis'koho buroho vugillia. Kyiv, Vyd-vo Akad.nauk URSR, 1959. 66 p. (MIRA 13:2)
(Dnieper Basin--Coal tar)

PHASE I BOOK EXPLOITATION SOV/4350

Soveshchaniye po khimii, tekhnologii i primeneniyu proizvodnykh piridina i khinolina. Riga, 1957

Khimiya, tekhnologiya i primeneniye proizvodnykh piridina i khinolina: materialy soveshchaniya (Chemistry, Technology and Utilization of Pyridine and Quinoline Derivatives; Materials of the Conference) Riga, Izd-vo AN Latviyskoy SSR, 1960. 299 p. Errata slip inserted. 1,000 copies printed.

Sponsoring Agencies: Akademiya nauk Latviyskoy SSR. Institut khimii; Vsesoyuznoye khimicheskoye obshchestvo.

Ed.: S. Bazhanova; Tech. Ed.: A. Klyavinya; Editorial Board: Yu. A. Bankovskiy, Candidate of Chemistry, E. V. Vanaga, Candidate of Chemistry (Resp. Ed.), L. P. Zalukayev, Doctor of Chemistry, and M. M. Kalnyn'.

PURPOSE: This book is intended for organic chemists and chemical engineers.

COVERAGE: The collection contains 33 articles on methods of synthesizing or producing pyridine, quinoline, and their derivatives from natural sources. No personalities are mentioned. Figures, tables, and references accompany the articles.

TABLE OF CONTENTS:

I. PYRIDINE AND QUINOLINE DERIVATIVES OBTAINED FROM THE THERMAL CRACKING PRODUCTS OF FUELS

KUZNETSOV, V. I.

KUZNETSOV, V.I., kand. khim. nauk

Trends in the use of Dnieper Basin coals for industrial purposes. Kompl. vyk. pal.-energ. res. Ukr. no.1:175-180 '59. (MIRA 16:7)

1. Institut teploenergetiki AN UkrSSR.
(Dnieper Basin—Coal)

KUZNETSOV, V.I., kand. khim. nauk; BOBROVA, A.O.

Production of lignite wax in the Ukraine. Kompl. vyk. pal.-energ. res. Ukr. no.1:230-242 '59. (MIRA 16:7)

1. Institut teploenergetiki AN UkrSSR.
(Coal-tar products)

GOLOVANOV, Nikolay Grigor'yevich; KUZNETSOV, V.I., kand.khim.nauk, otv.red.; TUBOLEVA, M.V., red.

[Solid fuel as a chemical raw material] Tverdoe toplivo kak khimicheskoe syr'e. Kiev, 1961. 41 p. (Obshchestvo po rasprostraneniiu politicheskikh i nauchnykh znanii Ukrains'koi SSR. Ser.6, no.2)

(MIRA 14:5)

(Fuel) (Chemical industries)

KUZNETSOV, V.I.; BOBROVA, A.A. [Bobrova, A.O.]; LYSYY, P.L.

Effect of various factors on the deresination process of lignite wax by the method of crystallization. Zbir.prats' Inst.tepl.AN URSR no.23:71-79 '61. (MIRA 15:2)
(Lignite)
(Waxes)

SHVETS, I.T., akademik, otv. red.; DAL', V.I., doktor tekhn. nauk, red.; SHCHEGOLEV, G.M., kand. tekhn. nauk, zam. otv. red.; OSTROVSKIY, S.B., red.; LAVROV, P.I., kand. tekhn. nauk, red.; LANDSMAN, S.U., kand. tekhn. nauk, red.; KUZNETSOV, V.I., kand. khim. nauk, red.; SUSHON, S.P., inzh., red. DAKHNO, Yu.B., tekhn. red.

[Complete utilization of Ukrainian solid fuels]Kompleksnoe izpol'zovanie tverdykh topliv Ukrainy. Kiev, Izd-vo AN USSR, 1962. 287 p. (MIRA 15:11)

1. Akademiya nauk UkSSR, Kiev. Rada po vyvchenniu produktyvnykh syl URSR. 2. 2. Akademiya nauk Ukr.SSR (for Shvets). 3. Nachal'nik otdela toplivnoy promyshlennosti Gosudarstvennogo planovogo komiteta Soveta Ministrov Ukr. SSR (for Ostrovskiy). 4. Institut teploenergetiki Akademii nauk Ukr.SSR (for Shchegolev, Sushon).

(Ukraine--Fuel)

BOBROVA, A.A. [Bobrova, A.O]; KUZNETSOV, V.I.

Dynamics of the process of wax crystallization. Zbir. prats' Inst. telp. AN URSR no.25:51-55 '62.

Use of toluol and its mixtures for bitumen extractions from brown coals. Zbir. prats' Inst. tepl. AN URSR no.25:56-61 '62. (MIRA 17:1)

ACC NR: AP6032533 SOURCE CODE: UR/0413/66/000/017/0133/0133

INVENTOR: Kushnerev, D. M.; Svetsinskiy, V. G.; Kir'yakov, V. M.; Kuznetsov, V. I.; Polikarpov, B. S.

ORG: none

TITLE: Ceramic flux for submerged arc welding of high-strength steels. Class 49, No. 185676 [announced by the Electric Welding Institute im. Ye. O. Paton, AN UkrSSR (Institut elektrosvarki AN UkrSSR)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 17, 1966, 133

TOPIC TAGS: automatic welding, high strength steel welding, ARC WELDING, CERAMIC MATERIAL

ABSTRACT: This Author Certificate introduces a ceramic flux for submerged arc welding of high-strength steels containing calcium fluoride, rutile concentrate, ferrotitanium, and ferromanganese. To improve the mechanical properties of welded joints and the technological properties of the flux, 5—12% quartz sand, 3—6% manganese ore, 4—6% manganese metal, 1% aluminum powder, and 18—24% sodium disilicate are added to the flux composition. The rest of the components are taken in the following proportion: 10—18% fluorspar, 30—40% rutile concentrate, 0—2% ferrotitanium and 3—5% ferro manganese.

SUB CODE: 13/ SUBM DATE: 23Jan65/

Card 1/1 UDC: 621.791.048

5(3) PHASE I BOOK EXPLOITATION SOV/3522

Kuznetsov, Vladimir Ivanovich

Razvitiye issledovaniy polimerizatsii nepredel'nykh soyedineniy v SSSR (Development of Studies in Polymerization of Unsaturated Compounds in the USSR) Moscow, AN SSSR, 1959. 274 p. Errata slip inserted. 3,000 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Institut istorii yestestvoznaniya i tekhniki.

Resp. Ed.: A.Ye. Arbuzov, Academician; Ed. of Publishing House: L.S. Povarov; Tech. Ed.: G.A. Astaf'yeva.

PURPOSE: This book is intended for persons interested in obtaining information on the role of A.Ye. Favorskiy in the development of theories pertaining to the field of organic chemistry and in the investigation of polymerization and isomerization phenomena.

Card 1/6

Development of Studies (Cont.)

SOV/3522

COVERAGE: The book, published on the 100th anniversary of the birth of A.Ye. Favorskiy, briefly outlines the development of theories of organic chemistry and emphasizes the importance of the work of the latter in developing the studies of A.M. Butlerov in the field of polymerization and isomerization. The author analyzes correlation of atoms, isomeric conversion, problems of chemical affinity, and describes the investigations of S.V. Lebedev, which led to the development of rubber synthesis and synthetic rubber production. The reaction of ketone with acetylene compounds and its application in the synthesis with various polymers is analyzed. The author also reviews the polymerization mechanism, ionic polymerization, telomerization, and the polycondensation theory. Each chapter is accompanied by references, the majority of which are Soviet.

TABLE OF CONTENTS:

Card 2/6

KUZNETSOV, V.I.

Contradictions in the evaluation of V.Ostval'd's role in the history of catalysis. Vop.ist.est.i tekh. no.10:79-85 '60. (MIRA 14:3)
(Catalysis)

KUZNETSOV, V.I.

Principal stages in the development of organic catalysis in the U.S.S.R. Vop.ist.est.i tekh. no.9:51-61 '60. (MIRA 13:7)
(Catalysis)

KUZNETSOV, Vladimir Ivanovich; ARBUZOV, A.Ye., akademik, otv. red.; POVAROV, L.S., red. izd-va; GUSEVA, A.P., tekhn. red.; MAKOGONOVA, I.A., tekhn. red.

[Origin and development of the chemistry of alicyclic compounds] Vozniknovenie khimii alitsiklicheskikh soedinenii. Moskva, Izd-vo Akad. nauk SSSR, 1961. 185 p. (MIRA 14:11)
(Alicyclic compounds)

KUZNETSOV, V.I.

Some conclusions from the history of the dual reactivity theory. Vop. ist. est. i tekh. no.13:19-25 '62. (MIRA 16:5)

(Chemical reaction--Conditions and laws)

KUZNETSOV, V.I.

Views of Liebig, Gess, and Khodnev on catalysis. Trudy Inst.ist. est.i tekh. 39:95-103 '62. (MIRA 16:2)
(Catalysis)

KUZNETSOV, V.I.; VATULYAN, K.S.

Syntheses of first alicyclic compounds. Trudy Inst.ist.est.i tekh. 39:212-221 '62. (MIRA 16:2)
(Cyclic compounds)

KUZNETSOV, V.I.; MAR'YEVA, N.N.

Organic coprecipitants. Part 18: Coprecipitation of germanium with the tannates of basic dyes. Izv. SO AN SSSR no.11 Ser.khim. nauk no.3:50-55 '63. (MIRA 17:3)

1. Khimiko-metallurgicheskiy institut Sibirskogo otdeleniya AN SSSR, Novosibirsk.

KUZNETSOV, Vladimir Ivanovich; EYDUS, Ya.T., doktor khim. nauk, otv. red.; FEDOROVICH, R.M., red.
[Development of the science of catalysis] Razvitie ucheniia o katalize. Moskva, Nauka, 1964. 422 p.
(MIRA 17:9)

KUZNETSOV, Vladimir Ivanovich; ARBUZOV, A.Ye., akademik, otv. red.; KATRENKO, D.A., red.

[Advances in the field of catalytic organic synthesis] Razvitie kataliticheskogo organicheskogo sinteza. Moskva, Nauka, 1964. 433 p. (MIRA 17:12)

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KUZNETSOV, V.I., doktor khimich.nauk

Contemporary methods of identification of organic compounds.
Zhur. VKHO 9 no. 2:177-186 '64. (MIRA 17:9)

radioisotope separati

-late, arsenazo, crystal violet

bination with crystal violet takes place at p

III and 4,4'-biphenyl-3,3'-di

L 06498-67 EWT(m)

ACC NR: AP7000462 SOURCE CODE: UR/0367/66/004/001/0099/0101

KUZNETSOV, V. I.; SKOBELEV, N. K.; FLEROV, G. N.

"Observation of a Spontaneously Fissionable Isomer with $T_{1/2}$ = 2.6 min in the Nuclear Reactions $U^{233} + B^{11}$ and $U^{233} + B^{10}$"

Moscow, Yadernaya Fizika; July, 1966; pp 99-101

ABSTRACT: In the nuclear reactions $U^{233} + B^{11}$ and $U^{233} + B^{10}$ a spontaneously fissionable product with $T_{1/2} = 2.6 \pm 0.2$ min was observed. The excitation function of this product in the reaction $U^{233} + B^{11}$ was investigated. The maximum production cross section was found to be of the order $2 \cdot 10^{-31}$ cm². The conclusion was drawn that the Am nucleus or that of another lighter element with mass number $A < 236$ undergoes a spontaneous fission with $T_{1/2}$ = 2.6 min. The experiments were performed on the internal beam of the U-300 cyclotron of the Joint Institute for Nuclear Research. The authors thank K. A. Gavrilov and coworkers of his group for preparation of the targets, B. V. Shchitov for helping with the work, S. M. Polikanov and V. A. Druin for useful advice during the carrying out of experiments and for valuable discussion, and S. P. Trot'yakova and T. I. Rubakova, who carried out much work on the processing of the detectors. Orig. art. has: 2 figures. [Based on authors' Eng. abst.] [JPRS: 37,330]

ORG: Joint Institute for Nuclear Research (Ob"yedinnyy institut yadernykh issledovanniy)

TOPIC TAGS: nuclear reaction, isomer, cyclotron

SUB CODE: 20 / SUBM DATE: 27Dec65 / ORIG REF: 002

Card 1/1

KUZNETSOV, V. I., CAND BIO SCI, "THE IMPORTANCE OF ABOMASUM INTEROCEPTORS AND THE SMALL INTESTINE ~~SECTION~~ IN THE DEVELOPMENT OF ALLERGIC REACTIVITY IN SHEEP." SARATOV, 1961. (SARATOV ORDER OF LABOR RED BANNER STATE UNIV IM N. G. CHERNYSHEVSKIY). (KL, 2-61, 204).

L 26629-66 EWT(1)/EWP(m)/EWA(d)/EWA(h) WW/GW

ACC NR: AP6013926 (A) SOURCE CODE: UR/0207/66/000/002/0090/0096

AUTHOR: Kuznetsov, V. I. (Moscow); Lyakhov, G. M. (Moscow)

ORG: none

TITLE: Experimental investigation of the interaction between shock waves and barriers in the soil

SOURCE: Zhurnal prikladnoy mekhaniki i tekhnicheskoy fiziki, no. 2, 1966, 90-96

TOPIC TAGS: ~~compression~~ shock wave, shock wave analysis, wave mechanics, shock wave interaction, soil mechanics

ABSTRACT: Data are given from experiments on the interaction between a plane shock wave and a moving barrier in the ground. An approximate solution is given for the problem of this interaction considering the soil to be nonlinearly elastic at high pressures and plastic at low pressures. This type of model is applicable to shock waves in soils with and without water saturation. Experiments are conducted to determine the curve for the dynamic compressibility of the soil and it is shown that this curve conforms to the equation of state for water-saturated soil considered as a three-component ideal liquid at pressures greater than $15\text{-}20 \cdot 10^5$ N/m^2. The expressions for the load on the barrier gave results which agreed satisfactorily with direct experimental measurements. The authors are grateful to S. D. Mizyakin for taking part in the experiments. Orig. art. has: 7 figures, 23 formulas.

SUB CODE: 20/ SUBM DATE: 16Aug65/ ORIG REF: 007/ OTH REF: 000

Card 1/1

L 26763-66 EWT(1)/EWP(m)/EWA(d)/EWA(h) WW

ACC NR: AP6013927 SOURCE CODE: UR/0207/66/000/002/0096/0099

AUTHOR: Kuznetsov, V. I. (Moscow); Lyakhov, G. M. (Moscow)

ORG: none

62
62
B

TITLE: Interaction between a wall and waves from a one-dimensional gas detonation with long and negligibly short periods of ignition induction

SOURCE: Zhurnal prikladnoy mekhaniki i tekhnicheskoy fiziki, no. 2, 1966, 96-99

TOPIC TAGS: gas detonation, detonation wave, wave mechanics, shock wave reflection

ABSTRACT: The authors consider collision between an absolutely rigid wall and a plane shock front propagating in a reactive medium. It is assumed that the reflection is a detonation wave propagating in an explosive gas mixture treated as an ideal gas which is compressed by the precussion but has not yet reacted. This case is possible when the period of the ignition induction in the incident wave is much longer than that in the reflected detonation wave. A theoretical formula is derived for the ratio between the velocities of the reflected and incident waves, assuming that there is no chemical reaction in the gas for a definite period of time during propagation of the incident wave. A second limiting case is considered where it is assumed that the entire region of the compressed gas in the detonation wave is completely filled with detonation products immediately after incidence of the wave front against the wall.

Card 1/2

L 26763-66

ACC NR: AP6013927

In conclusion the author thanks Ya. K. Troshin who suggested investigation of detonation wave collision. Orig. art. has: 2 figures, 18 formulas.

SUB CODE: 19, 20/ SUBM DATE: 03Dec65/ ORIG REF: 012/ OTH REF: 004

Card 2/2

L 20415-66 EWT(d)/EWP(1) IJP(c) BB/GG

ACC NR: AP6009903 SOURCE CODE: UR/0413/66/000/004/0104/0104

AUTHOR: Kuznetsov, V. I.; Ofitserov, G. M.

ORG: none

42
B

TITLE: Biax magnetic logical element. 16C Class 42, No. 179088

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 4, 1966, 104

TOPIC TAGS: logic element, computer circuit, computer storage, magnetic core storage, biax

ABSTRACT: The proposed biax magnetic logical element (see figure) carries two input windings, output windings, and a gate winding. To perform INHIBIT and EXCLUSIVE OR operations, the input windings are placed in both windows of the biax — in the same direction in one window and in opposite directions in the other. Orig. art. has: 1 figure. [DW]

Card 1/2 UDC: 681.142

L 20415-66

ACC NR: AP6009903

0

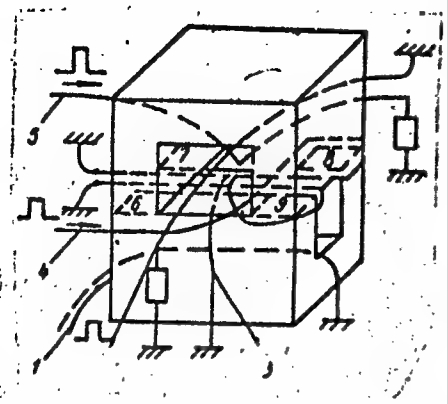

Fig. 1. Biax element

1 - Gate winding; 2, 3 - output windings; 4, 5 - diagonal input windings; 6—9 - platforms.

SUB CODE: 09/ SUBM DATE: 15Jan64/ ATD PRESS: 4222

Card 2/2 BK

KUZNETSOV, V.I. (Irkutsk)

Apply new higher standards in the maintenance and repair of cars. Zhel. dor. transp. 47 no. 11:40-45 N '65 (MIRA 19:1)

1. Nachal'nik sluzhby vagonnogo khozyaystva Vostochno-Sibirskoy dorogi.

KORENBERG, E.I.; KOVALEVSKIY, Yu.V.; KUZNETSOV, V.I.

Large-scale map drawing of the distribution of tetraonid birds. Ornitologiia no.7:371-379 '65.

(MIRA 18:10)

VASIL'YEV, A.M., red.; KUZNETSOV, V.I., red.; PETRUNICHEV, V.N., red.

[Computer and information techniques] Vychislitel'naia i informatsionnaia tekhnika; sbornik materialov. Moskva, Vses. in-t nauchnoi i tekhn. informatsii AN SSSR, 1962. 220 p. (MIRA 17:7)

1. Konferentsiya po obrabotke informatsii, mashinnomu perevodu i avtomaticheskomu chteniyu teksta. Moskva, 1961.

ACCESSION NR: AR3004181 S/0271/63/000/005/B042/B042

SOURCE: RZh. Avtomatika, telemekhanika i vy*chisl. tekhnika, Abs. 5B211

AUTHOR: Kurbakov, K. I., Kuznetsov, V. I.

TITLE: Industrial magnetic (ferrite) elements

CITED SOURCE: Sb. Vy*chisl. i inform. tekhnika. M., 1962, 91-112

TOPIC TAGS: ferrite element, logical element, computer element

TRANSLATION: The authors investigate the three-cycle logical elements "P", "M-12", "G", "I", "R", "Z", and "T" from ferrites and semiconductor diodes used in digital computers and automation devices. The elements are constructed of ferrite K-272 cores 4 x 2.5 x 1.2 mm. An exception to this is the "G" type which in addition to the K-272 core also has one of oxifer μ-1000. The coupling circuit contains inexpensive miniature (d = 7.2 mm) selenium diodes. The reliability of the cores decreases with an increase in temperature. Consequently, each element contains a working and a compensating core. Elements are either simple or complex. A simple or amplifying magnetic element is made

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ACCESSION NR: AR3004181

of magnetic cores having rectangular hysteresis loops and semiconductor diodes whose power supply consists of current pulses (feed pulses). A complex or logical magnetic element is a device similar to the simple element but it is able to perform logical operations according to the signals applied to its input. The presence of a signal at the element's output depends on the logic of its circuit. Simple elements are distinguished by their load capacity and their purpose, while complex elements differ according to the operation they perform. "P" and "M-12" elements store and amplify signals. The storage time is determined by the time between the leading edge of the cycle pulse of the first channel and the trailing edge of the pulse in the third channel. The output pulse from the "M-12" can magnetize up to 12 "P" elements. The "G" element generates a continuous sequence of units mutually delayed by 1 period of the source of feed pulses. The flow of units stops when the power supply is switched off. All complex elements have blocking windings. The blocking occurs in the second channel. The "I" element is used for the logical "AND-AND" coincidence operation, element "R" performs the nonequality operation, "Z" does the blocking, while the element "T" works on the principle of dynamic triggering. The load capability of "G", "I", "R", "Z", and "T" is such that each of them when operating from a preceding element under maximum

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load can operate three elements connected in parallel to their output. The guaranteed period of continuous operation of each element is 6 months, and normal operation proceeds between +10 and +60C and a relative humidity up to 85 ± 2%. The elements have good vibration resistance; they are mounted on plastic boards. Their weight is 10 g and they consume no more than 0.15-0.2 w. The universal digital computer LEM-1, the automatic control of the sheet pattern layouts of the rolling mill "Stal'-1", the automatic control of the railway locomotive operation "Avtomashinist", a specialized digital computer, and the universal digital computer LEM-1-24 were all designed using the abovementioned elements. The article also presents power supply requirements. There are 21 figures, 4 tables, and 7 references. V. S.

DATE ACQ: 25Jun63 SUB CODE: CP, SD ENCL: 00

Card 3/3

[illegible]

[illegible] card, storage device

[illegible] This Author Certificate presents a semipermanent capacity memory device of

[illegible]

[illegible] none

SUBMITTED: 26Nov63 ENCL: 01 SUB CODE: DP

NO REF SOV: 000 OTHER: 000

Card 1/2

ACC NR: AP7008933 SOURCE CODE: UR/0367/66/004/003/0465/0467

AUTHOR: Kuznetsov, V. I.; Lobanov, Yu. V.; Perelygin, V. P.
ORG: Joint Institute for Nuclear Research (Ob"yedinennyy institut yadernykh issledovaniy)
TITLE: Half-life of isotope of element 102 with mass number 256
SOURCE: Yadernaya fizika, v. 4, no. 3, 1966, 465-467
TOPIC TAGS: ion acceleration, cyclotron, radioisotope, alpha decay
SUB CODE: 20,18

ABSTRACT: In 1963, an isotope of the 102nd element of mass number 256 (Donets, Ye. D., Shchegolev, V. A., Yermakov, V. A., Atomnaya Energiya (Atomic Energy), 16, 195, 1964) was synthesized in the reaction $U^{238} + Ne^{22}$. Its identification was made with the help of physical and chemical methods according to the characteristics of the daughter nucleus Fm^{252}. However, the measurement accuracy of the half-life of the 102^{256} nucleus was no more than 40%.

Experiments were performed in 1963 for studying the spontaneous fission of the nuclei formed in the $U^{238} + Ne^{22}$ reaction (Druin, V. A., Skobelev, N. K., Fefilov, B. V., Flerov, G. N., Preprint P-1580, OIYaI, 1964). The half-life $T_{\frac{1}{2}} = 10^{\pm}$ seconds measured in this paper coincided, within the limits of error, with that obtained for isotope 102^{256} in the paper of the first paragraph above. The yield of this spontaneously fissioning nucleus corresponded to the maximum cross section $3 \cdot 10^{-34}$ cm^2. From the character of the excitation function, it may be concluded that the reaction in this case is $U^{238}(Ne^{22},4n)102^{256}$. The

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ACC NR: AP7008933

absence of the effect in the controlled irradiation of the U^{238} target by Ne^{20} and O^{16} ions has permitted it to be finally established that the 102^{256} nucleus undergoes its spontaneous fission in a 10-second period. From the relationship of the alpha decay and the spontaneous fission of this nucleus, the period of the spontaneous fission was found to be $T_f \approx 1500$ sec.

The experiments described in the present paper were undertaken with a view to measuring more accurately the half-life of the isotope of the 102nd element with mass number 256. The experiments were conducted with the internal beam of a U-300 OIYaI cyclotron. A schematic diagram of the equipment was given in a previous paper (Lobanov, Yu. V., Kuznetsov, V. I., Polikanov, S. M., Oganesyan, Yu. Ts., Flerov, G. N.; Ya F, 1, 67, 1965). The beam of accelerated ions passed through an aluminum foil 6 microns thick, dividing the inner space of the equipment from the cyclotron vacuum chamber, and fell on the target turned by the active layer on the ion collector side. The nucleus formed as the result of the interaction between the accelerated ions and the target broke away from the target under the impact of the incident particle and fell on the collector, a continuous nickel strip 8 m long and 25 mm wide. In the experiments, the film moved at a velocity of 6-10 cm/sec. This provided optimum conditions for measuring a half-life on the order of 10 seconds. For cooling the target, the ion collector, and the nucleus collector the inner space of the equipment was filled with helium under a pressure of 40 mm of mercury.

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ACC NR: AP7008933

In our experiments, we used a U^{238} and Pu^{242} target about 600 $\mu g/cm^2$ on a thin aluminum substrate; the bombarding particles were accelerated Ne^{22} and O^{18} ions. The intensity of the ion beam was 6-8 μa.

Special phosphorescent glasses and lavsan film, insensitive to small charged particles, were used as detectors of the fission fragments (Kapustsik, A., Porolygin, V. P., Tret'yakova, S. P., PTE, 5, 64, 1964; Fleischer, R. L., Price, P. B., Science, 140, 1221, 1963). The detectors were arranged along the film, practically continuously, their total length being 6 m.

In the irradiation of the U^{238} target by the accelerated Ne^{22} ions the recorded output of the spontaneously fissioned product with a half-life on the order of 10 seconds corresponded to a cross section on the order of $(2-3)\cdot 10^{-34}$ cm^2. An especially large output of this product was recorded when Pu^{242} was irradiated by accelerated O^{18} ions.

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Experiments with plutonium targets were made with the energy of the oxygen ions ranging from 89 to 104 Mev and a film velocity of 6.6 cm/sec.

A figure shows the yield of the fission products as a function of the energy and shows that the short-lived component has a curve which agrees nicely with the 4n reaction curve. The maximum yield was recorded when the oxygen ion energy was 94 Mev, which corresponds to the partial cross section $7 \cdot 10^{-34}$ cm^2. For the reaction $Pu^{242}(O^{18},p3n)101^{256}$, a somewhat larger cross section of $9.0 \cdot 10^{-34}$ was obtained for an O^{18} ion energy of 104 Mev.

Thus, in the experiments involving the irradiation of plutonium targets with accelerated O^{18} ions two products of spontaneous fission with different half-lives were recorded. The short-lived component, whose excitation function corresponds to the 4n reaction, was apparently caused by the spontaneous fission of the 102nd element of mass number 256.

Another figure shows the distribution of the recorded fragments of the short-lived component in equal time intervals for one series of experiments. The half-life of the 102nd element nucleus was, according to our measurements, $T_{\frac{1}{2}} = 8.2 \pm 1.0$ seconds. This period was chiefly the result of the alpha decay of the 102^{256} nucleus; it agrees well with previous results (see the first two papers cited above). The half-life period of ~3 sec predicted in the paper (Viola, V. E., Seaborg, G. T., Nuclear Systematics for Heavy Elements, N. Y., 1965) agrees satisfactorily with our data.

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ACC NR: AP7008933

Further experimentation with this nucleus should give information on its alpha decay energy as well as a more accurate value for the period of spontaneous fission.

The authors are especially grateful to G. N. Flerov for the statement of the problem and his management of the work. They also thank V. A. Druin and Yu. Ts. Oganesyan for their assistance and their discussion of the results, and S. P. Tret'yakova and T. I. Rybakova for preparing the fission fragment detectors. Orig. art. has: 2 figures. [JPRS: 40,303]

Card 5/5

ACC NR: AT6036655 SOURCE CODE: UR/0000/66/000/000/0282/0283

AUTHOR: Mozzhukhin, A. S.; Kuznetsov, V. I.; Kushakovskaya, M. S.; Makhalova, O.K; Goryachev, I. A.; Solntsev, S. A.; Shostak, V. I.; Kudrin, I. D.

ORG: none

TITLE: Effect of radioprotective drugs on the functional condition of the human organism [Paper presented at the Conference on Problems of Space Medicine held in Moscow from 24-27 May 1966]

SOURCE: Konferentsiya po problemam kosmicheskoy meditsiny, 1966. Problemy kosmicheskoy meditsiny. (Problems of space medicine); materialy konferentsii, Moscow, 1966, 282-283

TOPIC TAGS: radiation protection, space pharmacology, cosmic radiation biologic effect, human physiology, space medicine, motion sickness

ABSTRACT:
The effect of cystamine on the functional condition of the human organism was studied (on the the basis of the hypothesis of A. V. Lebedinskiy). Five hundred heathy volunteers were used. The maximum permissible dose of cystamine was established as a dose of 1.2 [units not given] per single application, or 0.8 units every 6 hr for 24 hr, or 0.6—0.8 units once a day for a month. Administration of cystamine in the doses indicated did not cause any significant changes in work capacity, hematopoiesis, or in cardiovascu-

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ACC NR: AT6036655

lar, respiratory, digestive, excretory, or nervous system function. However, administration of cystamine did lead to complaints of lethargy and brief unpleasant sensations in the epigastrium in 10% of the cases. After administration of the drug some increase in sensitivity to motion sickness and to the effect of high temperatures was noted among subjects.

[H. A. No. 22; ATD Report 66-116]

SUB CODE: 06 / SUBM DATE: 00May66

Card 2/2

L 01939-67 EWT(d)/EWP(c)/EWP(k)/T/EWP(v)/EWP(1) IJP(c)

ACC NR: AR6028529 SOURCE CODE: UR/0276/66/000/005/B007/B007

AUTHOR: Gorbunov, V. I.; Kuznetsov, V. I.; Kuleshov, V. K.; Yankelevich, Yu. B.

51
B

TITLE: Spectrometric methods for flaw detection in materials

SOURCE: Ref. zh. Tekhnologiya mashinostroyeniya, 14 Abs. 5B49

REF SOURCE: Izv. Tomskogo politekhn. in-ta, v. 138, 1965, 20-30

TOPIC TAGS: spectrometry, flaw detection spectrometry, retardation spectrometry, gamma radiation spectrometry, gamma detection, bremsstrahlung

ABSTRACT: The value of bremsstrahlung and gamma radiation spectrometry in practical use in flaw detection is outlined. An analysis of spectral emissions obtained back of absorbers of different thickness and density and an analysis of instrumental spectra allows a correct approach to the problem of optimal conditions for radioscopy of materials and products and thus considerably expand the control potentialities of flaw detection spectrometry. Orig. art. has: 8 figures and a bibliography of 12 reference items. L. Tsukerman. [Translation of abstract.] [AM]

SUB CODE: 20, 14, 11/

Card 1/1 hs UDC: 620.179.1

KUZNETSOV, V. I.

Agriculture Machinery - Trade and Manufacture

"Increasing efficiency in agricultural machinery factories; collection of suggestions incorporated into production." V. I. Kuznetsov, ed. Eng. P. A. Korchagin, Sel'Khozmashina, No. 4, 1952.

9. Monthly List of Russian Accessions, Library of Congress, August 1952. UNCL.

KUZNETSOV, V. I. (Prof)

"1949 Achievements in Soviet Science and Technology," Moscow, 1950

Digest W-17531, 30 Mar 51

DARKOV, A. V. and KUZNETSOV, V. I.

Statika Sooruzhenii (Static Calculations in Building), 531 p., Moscow, 1951.

KUZNETSOV, V.I.

[New Ukrainian achievements in science and technology] Novi dosiahnennia radians'koi nauky i tekhniky. Kyiv, 1951. 33 p. (MLRA 6:8)
(Ukraine--Science) (Science--Ukraine) (Ukraine--Technology)
(Technology--Ukraine)

KUZNETSOV, Vasilii Ivanovich.

Cushions; calculations of beams. Slabs plates, and frames Moskva, Gos. izd-vo lit-ry po stroitel'stvu i arkhitekture, 1952. 295 P. (54-18346 Rev)

TG260.K86

KUZNETSOV, V.I., doktor tekhnicheskikh nauk, professor.

Technology during the fifth five-year plan. Nauka i zhizn' 20 no.7:1-4 Jl '53. (MLRA 6:7)

(Technology)

KUZNETSOV, V.I.

The Committee on Stalin Prizes (of the Council of Ministers USSR) in the fields of science and inventions announces that the following scientific works, popular scientific books, and textbooks have been submitted for competition for Stalin Prizes for the years 1952 and 1953. (Sovetskaya Kultura, Moscow, No. [illegible], [illegible] Feb - 3 Apr 1954)

Name	Title of Work	Nominated by
Kuznetsov, V.I.	"Elastic Foundation"	Moscow Evening Machine Building Institute

SO: W-30694, 7 July 1954

KUZNETSOV, V.I.

The Committee on Stalin Prizes (of the Council of Ministers USSR) in the fields of science and inventions announces that the following scientific works, popular scientific books, and textbooks have been submitted for competition for Stalin Prizes for the years 1952 and 1953. (Sovetskaya Kultura, Moscow, No. 22-40, 20 Feb - 3 Apr 1954)

Name	Title of Work	Nominated by
Darkov, A. V. Kuznetsov, V. I.	"Statics of Structures" (textbook, 4th edition)	All-Union Correspondence Polytechnic Institute

SO: W-30604, 7 July 1954

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000928210005-4"

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000928210005-4"

reaction pressures and settling

KUZNETSOV, Vasiliy Ivanovich, professor; KIPNIS, S.Ye., redaktor; ISLENT'EVA, P.G., tekhnicheskiy redaktor.

[Technical progress in the U.S.S.R] Tekhnicheskii progress v SSSR. Moskva, Izd-vo "Znanie", 1954. 63 p. (Vsesoiuznoe obshchestvo po rasprostraneniiu politicheskikh i nauchnykh znanii, Ser. 2, no.20/21) (MLRA 7:8)
(Technology) (Russia--Economic conditions)

KUZNETSOV, V.I.

Soviet scientists' contributions to the theory of structural design on elastic foundations. Trudy po ist. tekh. no.8:168-183 '54. (MLRA 8:2)

(Structures, Theory of) (Foundations)

KUZNETSOV, V. I.

USSR/Physics

Card 1/1

Author : Kuznetsov, V. I., Dr. of Technical Sciences, Prof.

Title : Science of tenacity

Periodical : Nauka i Zhizn' 21/2, 23-25, Feb/1954

Abstract : The aim in machine construction is to reduce weight and retain strength. The weight per horse power of an airplane engine has gone down from 20 kilos to 0.3 kilos. The author goes into the question of elasticity and the direction of strains, the study of which enables the engineer to give such a shape to a part as will counteract them. Where theoretical calculations are not possible experiment is resorted to. Methods of conducting such experiments are explained.

Institution : .....

Submitted : .....

DARKOV, Anatoliy Vladimirovich, professor, doktor tekhnicheskikh nauk; KUZNETSOV, Vasiliy Ivanovich, professor, doktor tekhnicheskikh nauk; SHPIRO, G.S., kandidat tekhnicheskikh nauk, redaktor; VERINA, G.P., tekhnicheskiy redaktor

[Structural mechanics; the statics of structures] Stroitel'naia mekhanika; statika sooruzhenii. Izd. 5-oe, perer. Moskva, Gos. transp. zhel-dor. izd-vo, 1956. 492 p. (MIRA 9:11)
(Statics) (Structures, Theory of)

KUZNETSOV, V.I.

SOV/124-58-5-5909

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 5, p 137 (USSR)

AUTHOR: Kuznetsov, V.I.

TITLE: Application of the Method of Initial Parameters to the Calculation of Beams on an Elastic Isotropic Foundation (Primeneniye metoda nachal'nykh parametrov k raschetu balok na uprugom izotropnom osnovanii)

PERIODICAL: V sb.: Issledovaniya po teorii sooruzheniy. Nr 7, Moscow, Gosstroyizdat, 1957, pp 167-185

ABSTRACT: The well-known method of the initial parameter is described as applied to a design calculation of a support in the form of an elastic semispace. A beam with a planwise rectangular support (with sides equal to 2a and 2b, with a > b) is investigated under 3 different types of load. The load distribution is as follows: 1) a concentrated load applied at the center of the beam and at any arbitrary point, 2) two concentrated loads applied symmetrically relative to the center of the beam, and 3) a continuously distributed load. Numerical results are given for the solutions of some specific problems.

Card 1/1 1. Beams--Load distribution 2. Beams-- . P.I. Klubin
Mathematical analysis

DARKOV, Anatoliy Vladimirovich; KUZNETSOV, Vasiliy Ivanovich; Prinimali uchastiye: SINEL'NIKOV, V.V., doktor tekhn. nauk, prof.; KLEYN, G.K., doktor tekhn. nauk, prof.; SHPIRO, G.S., kand. tekhn. nauk; BYCHKOV, D.V., prof., retsenzent; REKACH, V.G., prof., retsenzent; BOCHAROVA, Yu.F., red. izd-va; GOROKHOVA, S.S., tekhn. red.

[Structural mechanics; statics structures] Stroitel'naia mekhanika; statika sooruzhenii. Moskva, Vysshaia shkola, 1962. 742 p. (MIRA 16:5)

(Strains and stresses)

KUZNETSOV, V.I.; GURIN, Ya.S., red.; TIMOKHINA, V.I., red.

[Asynchronous electric motors; piece series] Asinkhronnye elektro-dvigateli; edinaia seriia. Modifikatsii. [Moskva, 1951] 55 p. (MIRA 11:3)

1. Russia (1923- U.S.S.R.) Ministerstvo elektropromyshlennosti.
(Electric motors, Induction)

AUTHORS: Kuznetsov, V.I., Korkin, Yu.M. SOV-90-58-10-2/9

TITLE: Some Direct-Current Electric-Drive Systems for Geological-Prospecting Drills (Nekotoryye skhemy electroprivoda postoyannogo toka geologorazvedochnykh burovykh stankov)

PERIODICAL: Energeticheskiy byulleten', 1958, Nr 10, pp 3 - 8 (USSR)

ABSTRACT: The authors state that there is a tendency to use direct-current systems in branches connected with oil-drilling. They say that this tendency, and the fact that an electric drive such as a motor-generator set allows the rotor and the winch to work flexibly and steadily, has been taken into account by the design office of the plant imeni Vorovsky in their new drill type ZIV-2000E for geological prospecting-well-drilling to a depth of 2,000 meters. This is the first time that a direct current system combined with an individual drive for the rotor and winch has been used in the building of machines for geological prospecting. The drill consists of a rotor with a PN-400 electric motor 65 kw, independent excitation), a planetary winch, a 3-speed gearbox and a DK-104G traction motor of 72 kw. The electric motors of the rotor and the winch are driven by a P-101 generator (100 kw, independent excitation). This

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SOV-90-58-10-2/9

Some Direct-Current Electric-Drive Systems for Geological-Prospecting Drills

generator, the sludge pump and the synchro-generator for auxiliary needs are driven by a U1D6-50 diesel of 150 hp. This system allows the power of the diesel to be more fully exploited. During hoisting operations, the entire power of the diesel is consumed by the electric motor of the winch, when boring - by the rotor, the sludge pump and the other auxiliary mechanisms. The authors then give a detailed description, illustrated by graphs and fomulae, of how to find the most efficient gear-ratio for the gear-box. However, there are certain disadvantages in the use of a gear-box alone, and so the authors suggest that it is worth while studying various electric systems of achieving a stepless, automatic changing of the speed of raising the columns of boring tubes. There is only one way of making the mechanical characteristic curve of an electric motor close to the hyperbolic; by varying the tension either on the terminals or of the motor's magnetic current. The authors discuss

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SOV-90-58-10-2/9

Some Direct-Current Electric-Drive Systems for Geological-Prospecting Drills

several methods of regulating the rotation of the motor, and comes to the conclusion that the most flexible is one employing a dynamoelectric amplifier. There are 2 diagrams, three graphs and two Soviet references.

1. Geophysical prospecting--Equipment 2. Drilling machines--Design 3. Generators(DC)--Performance

Card 3/3

PHASE I BOOK EXPLOITATION SOV/3723

Kuznetsov, Vladimir Ivanovich

Mekhanicheskiye vakuumnyye nasosy (Mechanical Vacuum Pumps) Moscow, Gosenergoizdat, 1959. 279 p. 10,000 copies printed.

Ed. (Title page): M.I. Men'shikov; Ed. (Inside book): V.I. Shamshur; Tech. Ed.: P.M. Asanov.

PURPOSE: This book is intended for those working with mechanical vacuum pumps for industrial and laboratory uses. Certain sections of the book may be useful to engineers and scientific workers dealing with problems of obtaining medium or high vacua.

COVERAGE: This book deals with the working principles, the operation, and the testing of mechanical oil-sealed vacuum pumps. Also described are two-rotor (mechanical-booster) vacuum pumps. A brief summary of the molecular-kinetic theory of gases is given. General concepts of vacuum technology and the laws of

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rarefied-gas flow through orifices and tubes are considered. The types of pumps discussed include mechanical pumps for medium vacuum, low-vacuum multivane pumps, high-vacuum (molecular and steam-jet) pumps, and cold traps. Some problems in the design calculation of very simple vacuum systems are also discussed. The author thanks M.I. Men'shikov, I.S. Rabinovich, M.L. Alashkevich, P.I. Gorokhov, G.F. Kleymenov, K.A. Savinskiy, L.P. Khavkin, and A.B. Tseytlin for their suggestions. There are 32 references: 19 Soviet, 7 German, and 6 English.

TABLE OF CONTENTS:

PHASE I BOOK EXPLOITATION SOV/1548

Akademiya nauk SSSR. Komissiya po fiziko-khimicheskim osnovam proizvodstva stali

Primenenie vakuuma v metallurgii (Use of Vacuum in Metallurgy) Moscow, Izd-vo AN SSSR, 1960. 334 p. Errata slip inserted. 4,500 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Institut metallurgii imeni A.A. Baykova. Komissiya po fiziko-khimicheskim osnovam proizvodstva stali.

Resp. Ed.: A.M. Samarin, Corresponding Member, Academy of Sciences USSR; Ed. of Publishing House: G.M. Makovskiy; Tech. Ed.: S.G. Martsvich.

PURPOSE: This collection of articles is intended for technical personnel interested in recent studies and developments of vacuum steelmaking practice and equipment.

COVERAGE: The book contains information on steel melting in vacuum induction furnaces, and vacuum arc furnaces, reduction processes in vacuum, and degassing of steel and alloys. The functioning of apparatus and equipment, especially vacuum furnaces and vacuum booster pumps is also analyzed. Personalities are mentioned in connection with some of the articles and will appear in the Table of Contents. Three articles have been translated from English. Some of the

AVAILABLE: Library of Congress

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KUZNETSOV, V.I.

EBIN, L.Ye., doktor tekhn.nauk; ZUL', N.M., kand.tekhn.nauk; LEVIN, M.S., kand.tekhn.nauk; YAKOBS, A.I., kand.tekhn.nauk; ZHULIN, M.T., kand.tekhn.nauk; IL'ICHEV, F.V., inzh.; KUZNETSOV, V.I., inzh.

Concerning A.P.Korshunov's article "Efficient design of 6 to 10 kv. rural electric power transmission lines." Elek. sta. 32 no.12: 78-83 D '61. (MIRA 15:1)
(Rural electrification) (Electric power distribution)
(Korshunov, A.P.)

KUZNETSOV, V. I.

8 Copy p. 1 + 2

PHASE I BOOK EXPLOITATION SOV/6270

Samarin, A. M., ed., Corresponding Member, Academy of Sciences USSR.

Vakuumnaya metallurgiya (Vacuum Metallurgy). Moscow, Metallurgizdat, 1962. 515 p. Errata slip inserted. 3200 copies printed.

Ed. of Publishing House: V. I. Ptitsyna; Tech. Ed.: L. V. Dobuzhinskaya.

PURPOSE: This book is intended for engineering personnel of metallurgical and machine-building plants, scientific research workers and teachers, and aspirants and students at schools of higher technical education.

COVERAGE: Thermoydnamic fundamentals of vacuum application in various metallurgical processes and problems of melting in vacuum induction and arc furnaces are discussed. Procedures of casting large ingots and vacuum degassing of steel in ladles are described, along with designs of metallurgical vacuum equipment. Problems connected with the use of mechanical and steam-ejector vacuum pumps, and with the

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designing, calculation, and operation of vacuum systems, are reviewed in detail, along with vacuum-measuring techniques. No personalities are mentioned. Each article is accompanied by references, mostly Soviet.

TABLE OF CONTENTS:

Vacuum Metallurgy SOV/6270

Card 5/7-3/3

KUZNETSOV, V. I.

June Bug (Lachnosterna)

Planting pine in deep furrows as a means of protection against the June bug. Les. khoz. no. 1, Jan. 1952.

9. Monthly List of Russian Accessions, Library of Congress, September 1952, Uncl.

1. KUZNETSOV, V. I.

2. USSR (600)

4. West Kazakhstan Province--Lepidoptera

7. Problems of adjustment of lepidoptera to new feeding conditions, Trudy Zool. inst., 11, 1952.

9. Monthly List of Russian Accessions, Library of Congress, April, 1953, Uncl.

KUZNETSOV, V. I.; MARTYNOVA, Ye. F.

List of Lepidoptera along the central course of the Ural River. Trudy Zool. inst. 16:321-250 '54. (MIRA 8:6)
(Ural Valley--Lepidoptera)

KUZNETSOV, V.I.

Peach and cranberry leaf rollers (Peronea lubricana Mn. and P.fimbriana Thnbg.) (Lepidoptera, Tortricidae) as forms of the same species. Ent.oboz. 34:124-128 '55. (MLRA 9:5)
(Leaf rollers)

KUZNETSOV, V.I.

New leaf rollers (Tortricidae) and leaf miners (Lithocolletoidea) from western Kopet-Dag [with summary in German]. Ent.obozr. 35 no.2: 447-461 '56. (MLRA 9:10)

1. Zoologicheskiy institut Akademii nauk SSSR, Leningrad.
(Kopet-Dag--Leaf rollers) (Kopet-Dag--Leaf miners)

USSR/General and Specialized Zoology - Insects. P.

Abs Jour : Ref Zhur - Biol., No 9, 1958, 40129

Author : Semenov, A.E., Kuznetsov, V.I.
Inst : -
Title : The Siberian Onion Moth- Acrolepia alliella sp. n.- a New Onion Pest on the Extreme North.

Orig Pub : Zool. zh., 1956, 35, No 11, 1676-1680

Abstract : The onion moth was described in detail and its larvae were described in short. This species is morphologically different from A. assectella. It injures the onion, garlic and especially the wild siberian onion, which is widely distributed in the river lands of the extreme North. Mechanical and chemical methods of control are recommended. -- A.P. Adrianov.

Card 1/1

USSR / General and Special Zoology. Insects. Insect and Mite Pests. P

Abs Jour: Ref Zhur-Biol., No 12, 1958, 54356.

Author : Kuznetsov, V. I.
Inst : AS Armenian SSR.
Title : Two New Species of Gall-Forming Moths (Lepidoptera, Microheterocera) Causing Damage to Shrubbery in Armenia.

Orig Pub: Dokl. AN ArmSSR, 1957, 25, No 1, 43-48.

Abstract: This is a description and 6 drawings of Augasma atraphaxidellum sp. n. and Ascalenia grisella sp. n. Information on the biology of these species,

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KUZNETSOV, V.I.

USSR/General and Special Zoology. Insects. Injurious Insects and Ticks. Pests of Fruit and Berry Crops P

Abs Jour : Ref Zhur - Biol., No 11, 1958, No 49640

Author : Kuznetsov V.I.
Inst : -
Title : The Biology and Species of the Pyralid Leaf-Roller Moths of the Genus Euzophora Z. Damaging the Pomegranate, the Apple Tree and the Quince

Orig Pub : Entomol. obozreniye, 1957, 36, No 1, 59-71

Abstract : E. punicaella larvae winter under the bark of skeletonized branches and in the pool of the pomegranate's fruit; they pupate at the end of April or the beginning of May. The moths emerge in the first 10 days of May and deposit their eggs in the pomegranate bark, where the first generation of larvae develops in the bast in May-June. The emerging moths deposit their eggs on the bark and on the fruits of pomegranate and apple trees. In

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Abs Jour : Ref Zhur - Biol., No 11, 1958, No 49640

the fruits of the pomegranate, two or three generations develop. It was established that the moths of the pomegranate leaf-roller moth and E. ligella from Bukhara belong to the same species of E. punicaella. Literary data about the damage to pomegranates, apples, quinces and peaches in Central Asia by the leaf-roller moths of the Euzophora genus should be related to the activity of E. punicaella. The exposed peculiarities of the biology of the pomegranate leaf-roller moth call for changes in the existing system of leaf-roller moth control. -- A.P. Adrianov

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KUZNETSOV, V.I.

The oleaster moth Anarsia eleagnella W.Kuzn., sp.n. (Lepidoptera, Gelechiidae), a new oleaster pest in the U.S.S.R. [with summary in English]. Zool. zhur. 36 no.7:1096-1098 Jl '57. (MLRA 10:9)

1. Zoologicheskiy institut Akademii nauk SSSR.
(Moths) (Oleaster--Diseases and pests)

KUZNETSOV, V.I.

Two new moth species (Lepidoptera, Microheterocera) injurious to shrubs in Armenia. Dokl. AN Arm. SSR 27 no.1:53-57 '58. (MIRA 11:9)

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(Armenia--Moths) (Shrubs--Diseases and pests)